


Joint National Training Capability Horizontal Training Event January 2004



Technology Division
Training & Education
Command
US Marine Corps

OUTLINE

- PREPARATION AND INFRASTRUCTURE UPGRADES
- EXECUTION
- KEY ISSUES



MCAGCC Simulation Center became a ***Battle Simulation Center***

- MARFOR Command Cell
- Virtual LAR Co (DVTE)
- Briefing Cell
- IT Infrastructure Upgrades
- Security

MARFOR HQ



Col Andy Frick, MARFOR CO

- 24 Hour Staffing
- Full G-Staffing

VIRTUAL LAR Screen Mission



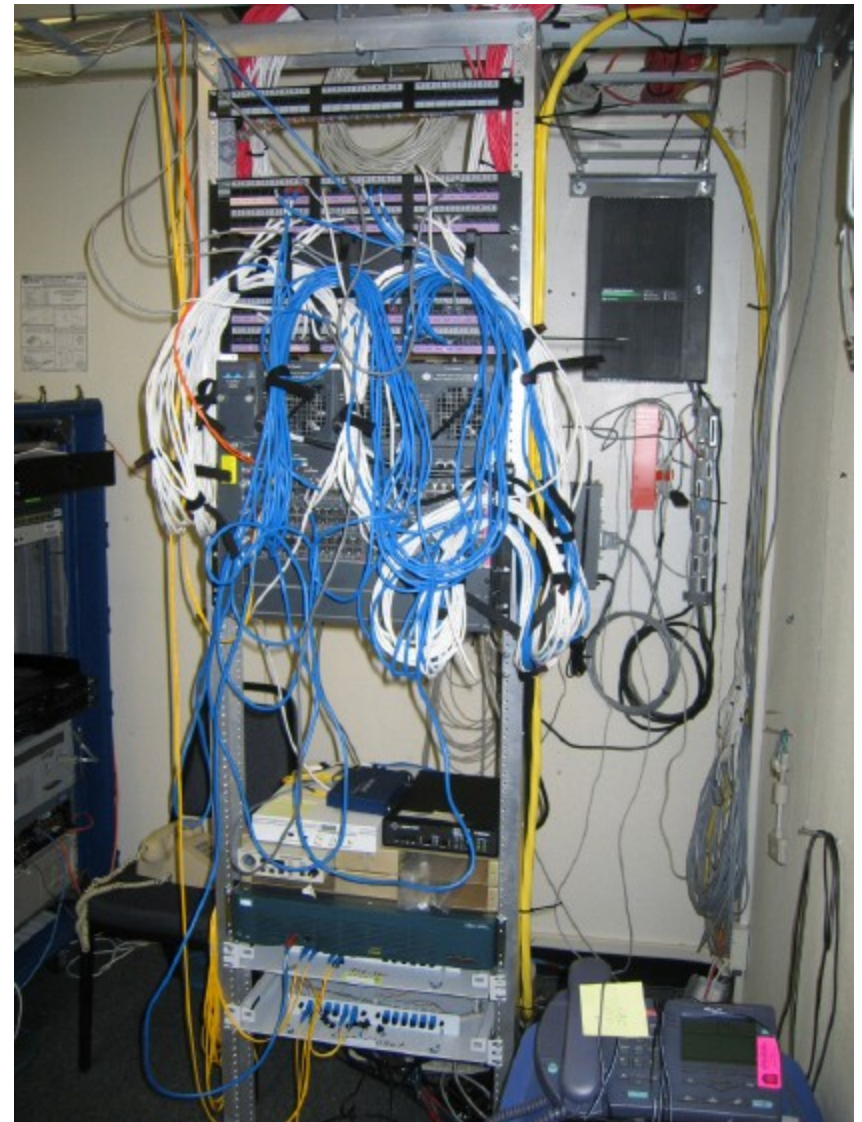
3rd LAR

NETWORK UPGRADES

- JFCOM deployable network racks.
- VOIP telephony, Microsoft Windows NT network, Print Services, File Services, and Exchange Mail
- Loaner gear



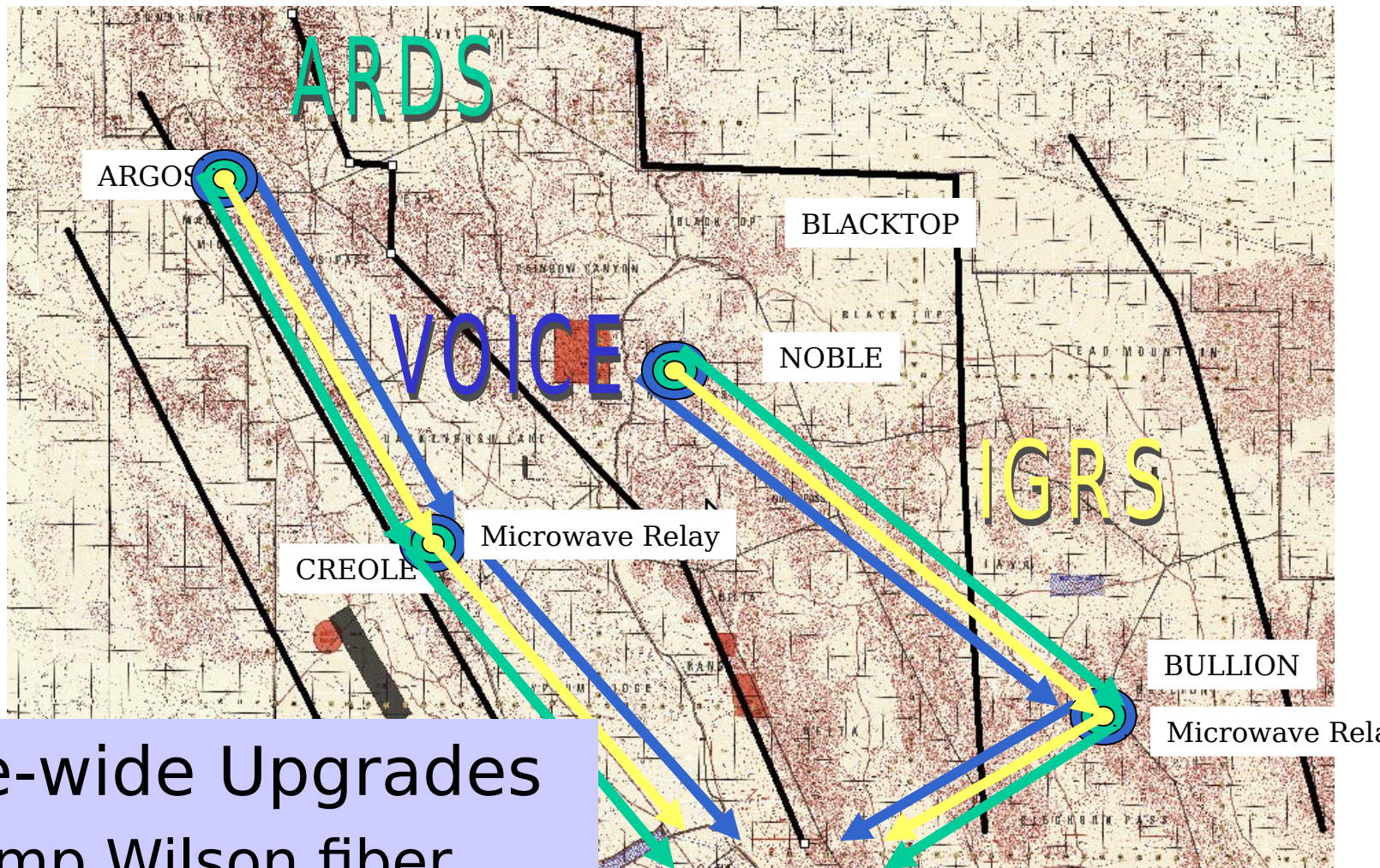
- Network rack connectivity organic to the 29 Palms BSC
- Provides the connectivity to the existing fiber to Bearmat
- Power Upgrade for the BSC



- Trailers added
 - JECG
 - ARDS/IGRS Control

- Security Upgrades
 - In-processing Center
 - Security Fence
 - Locks/Doors





- Base-wide Upgrades
 - Camp Wilson fiber
 - Solar Power upgrades
 - End-to-End 16XT1

JNTC JMO ASSISTANCE

- MCAGCC Infrastructure
- Deployable Virtual Training Environment (DVTE)
 - Integration Event
 - TENA
 - Execution Support
- Integrated GPS Radio System (IGRS)
 - TENA
 - Execution Support
- Advanced Range Data System (ARDS)

EXECUTION







LAS VEGAS

250600 JAN

BARSTOW

ARFOR
XXXX
MARFOR

VICTORVILLE
SPOD

PALM CITY SPOD

BAY OF CAJON

BAY OF ARTANIS

250600 JAN

EXN

11
XX
42

XX

3-12
12
12
1
2-1
12
4-12
12
1-12
12
1
95(C)

3-12
11
4-12
12
11
IMC

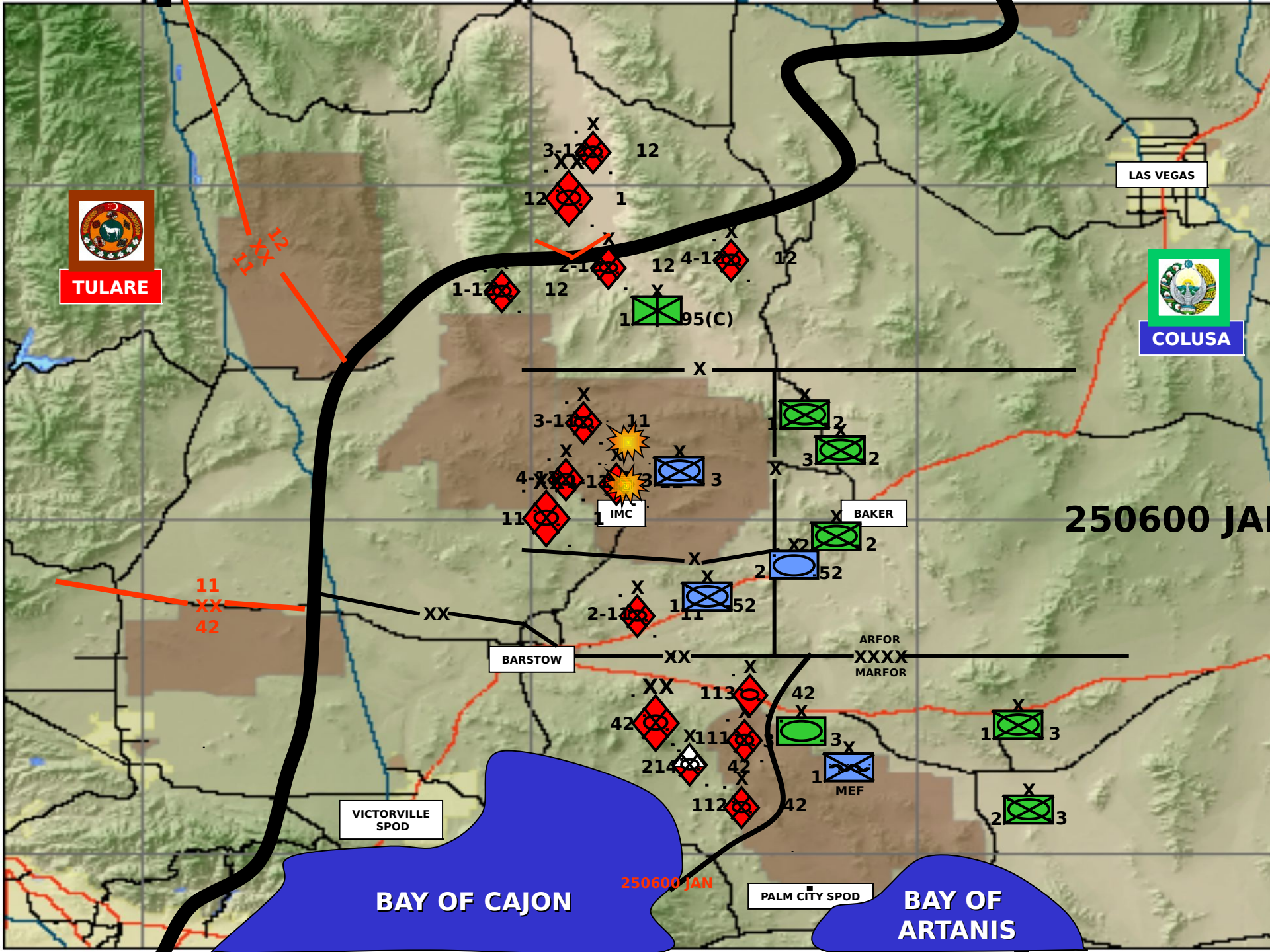
2-12
11
52

XX
113
42
X11
214
112
42

3
2
3
2
52
11
52

MEF

1
3
2
3



29 JAN 04 SORTIES

- 54 FW Sorties
 - 2x4ship F-16s
 - 1x2ship USN F/A-18
 - 44 USMC
- 24 Sim (include U-2, V-JSTARS)
- 4 RW

Live/Range

Live/Real World C²

MAGTF

6

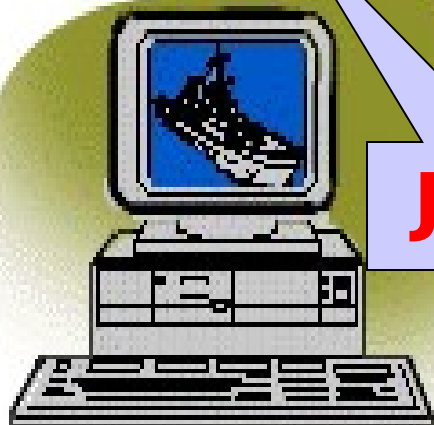
CAX FORCE
1ST BN 2ND
MARINES

*Synthetic
Forces*

*Virtual Simulators
& Simulations*

DVTE

JCATS

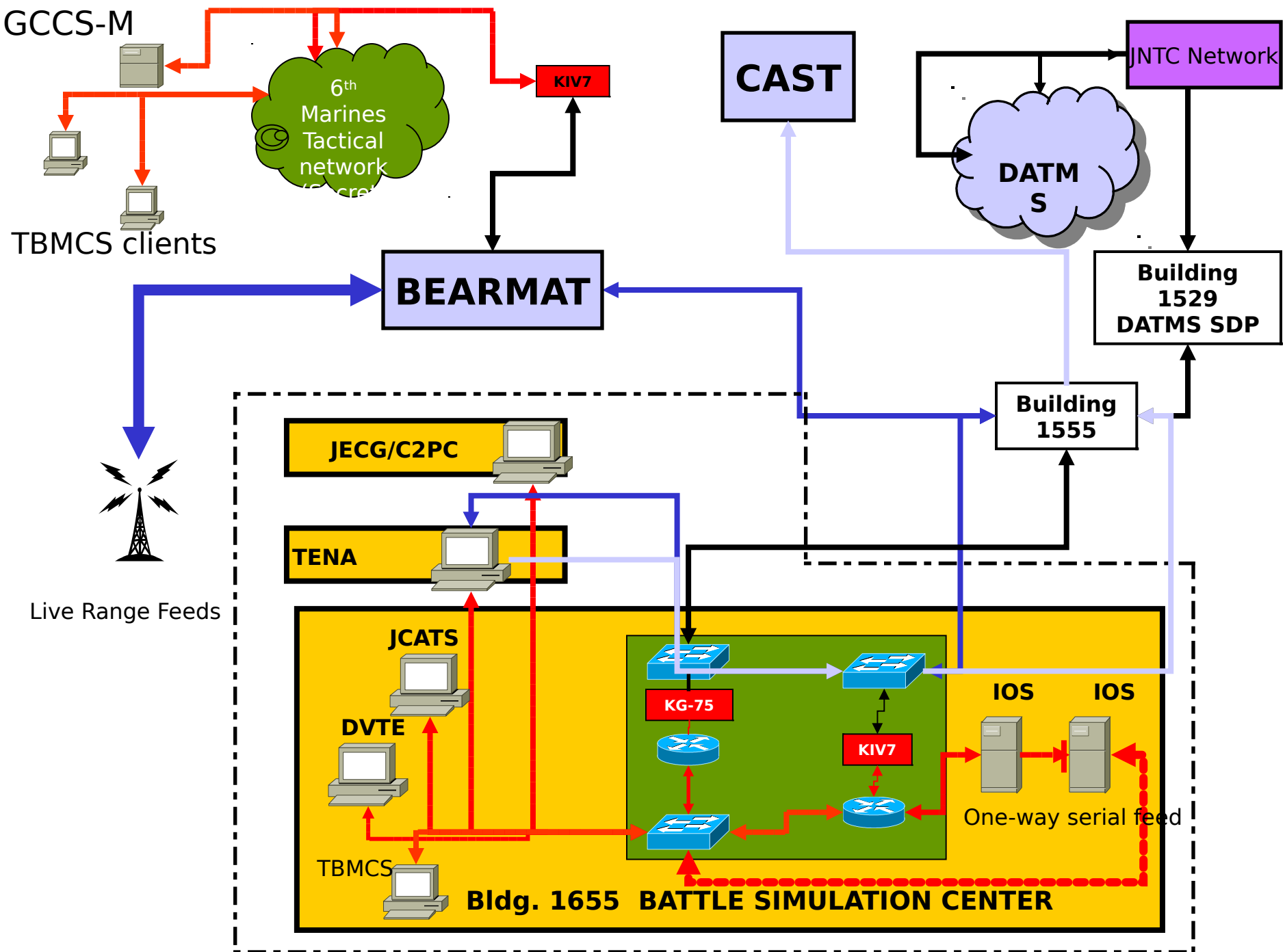


A topographic map of a mountainous region with various peaks and valleys. Overlaid on the map are several colored and patterned areas representing different exercise zones. A large blue hatched area covers the upper central part of the map. A green area is on the left, and a red hatched area is on the right. Blue lines and boxes mark specific points of interest. A lightning bolt symbol is located near the center of the map.

**Combined Arms Exercise
Live -fire and Maneuver space**

**Constructive/Virtual
corridor**

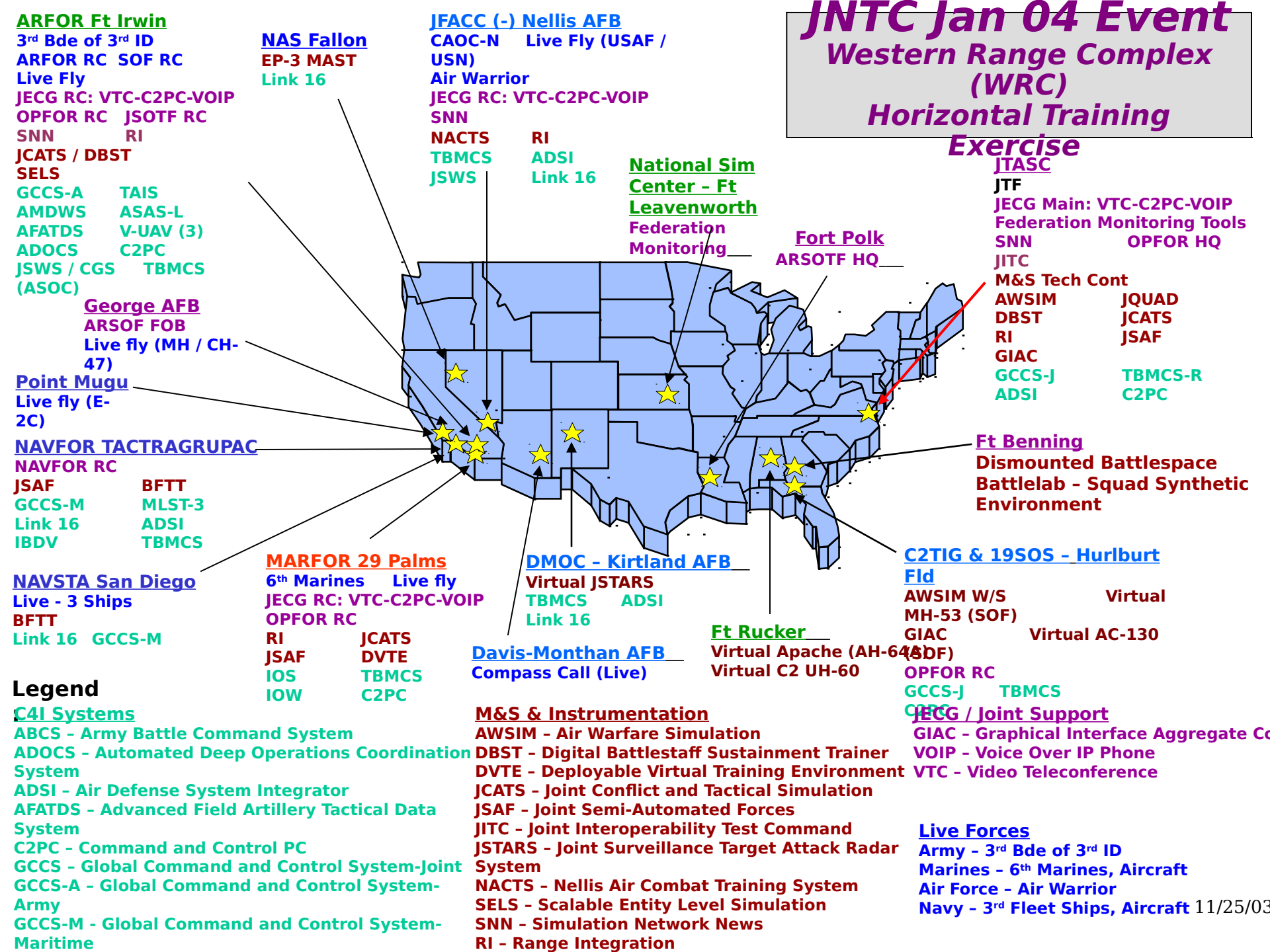
**Constructive
corridor**



JNTC Jan 04 Event

Western Range Complex (WRC)

Horizontal Training Exercise



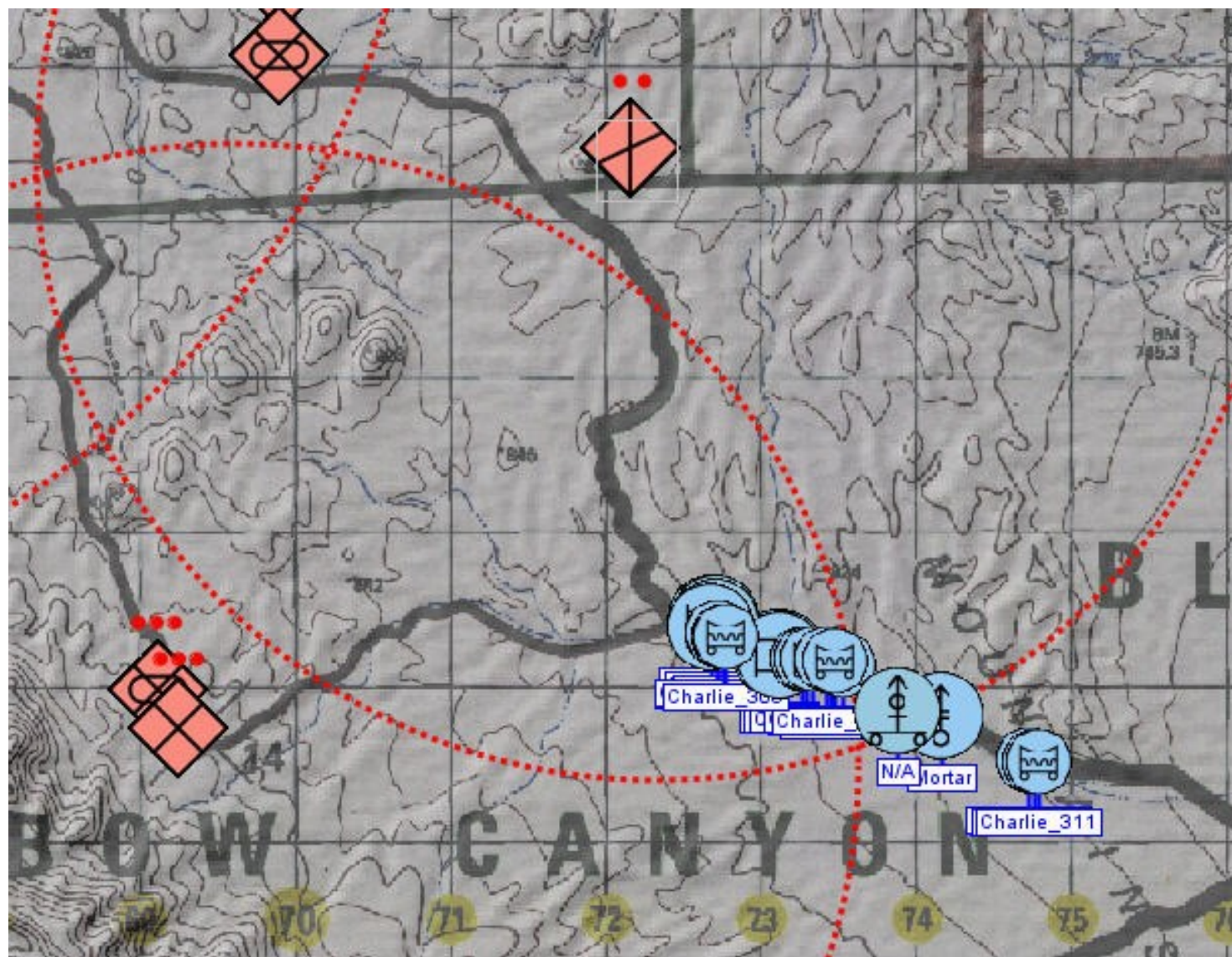
TRACKING

- Air
 - **Advanced Range Data System (ARDS)**
 - 13 - EAF
 - **Air Warrior System (AWS)**
 - 13 - EAF
- Ground
 - **Integrated Global Positioning System (GPS) Radio System (IGRS)**
 - 175 entities at 29 Palms

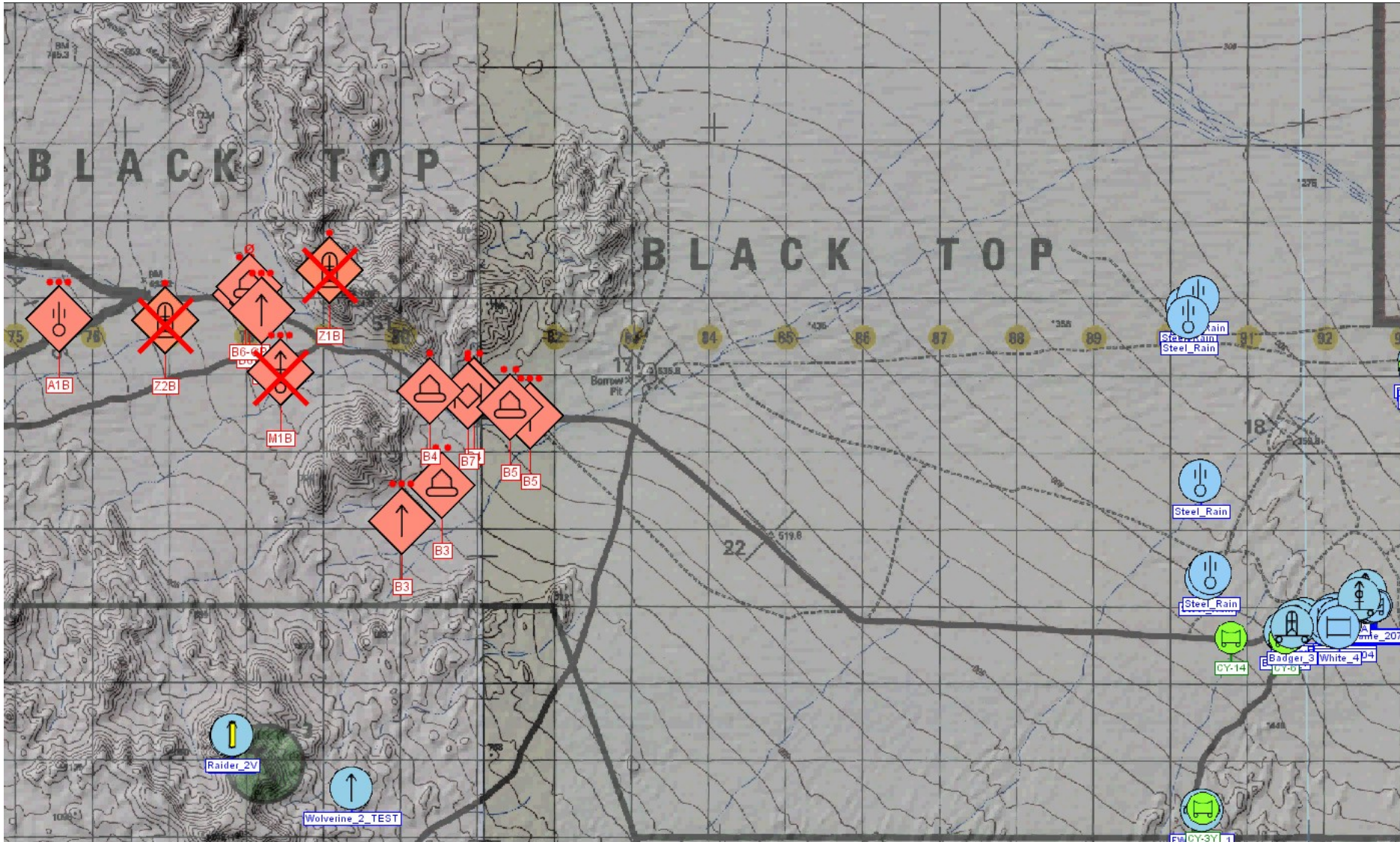


Integrated GPS Radio System (Ver
1.0)

IGRS PLAYBACK TO MAGTF6 AND CYs

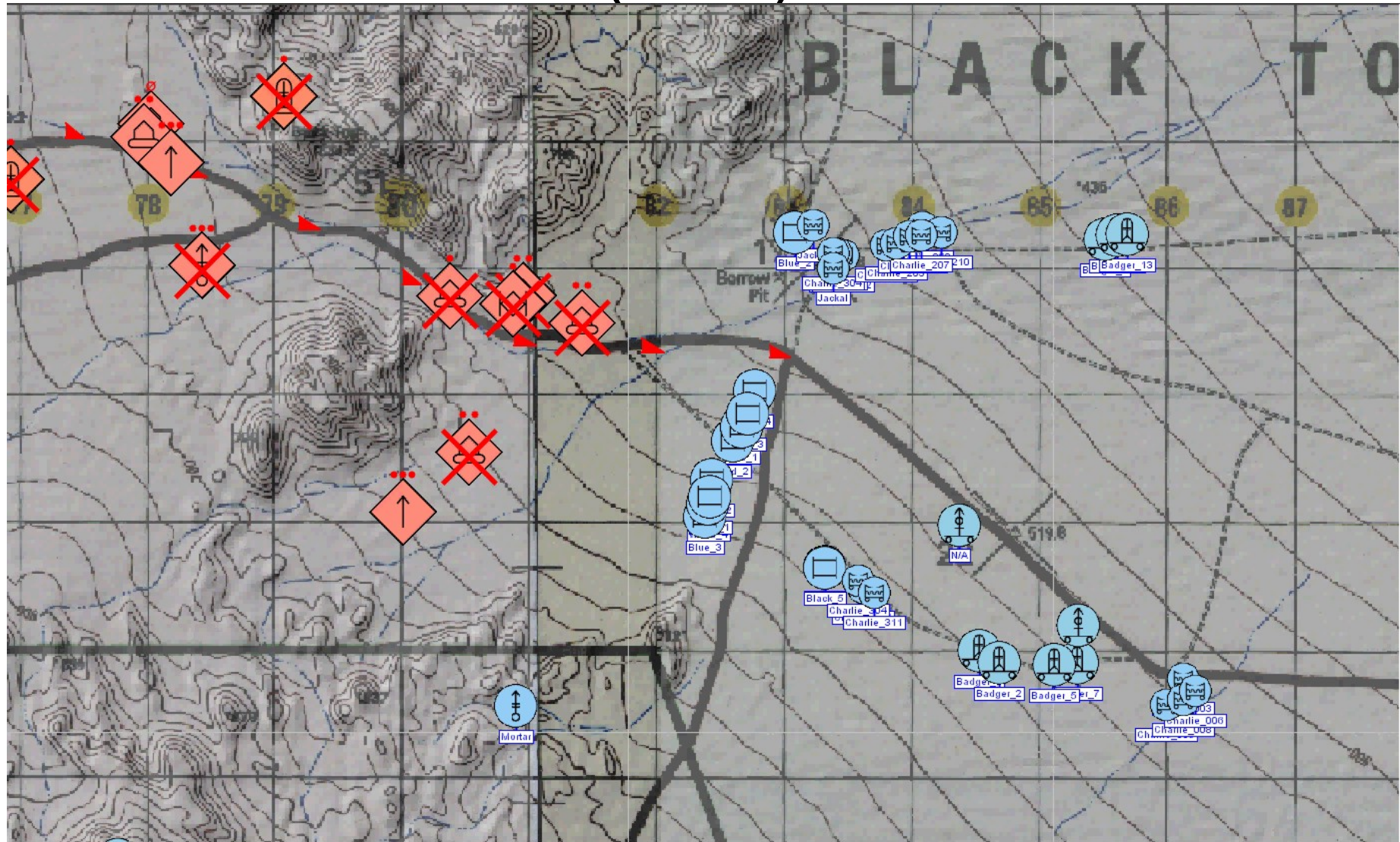


CAX FINEX Day 1 (click)

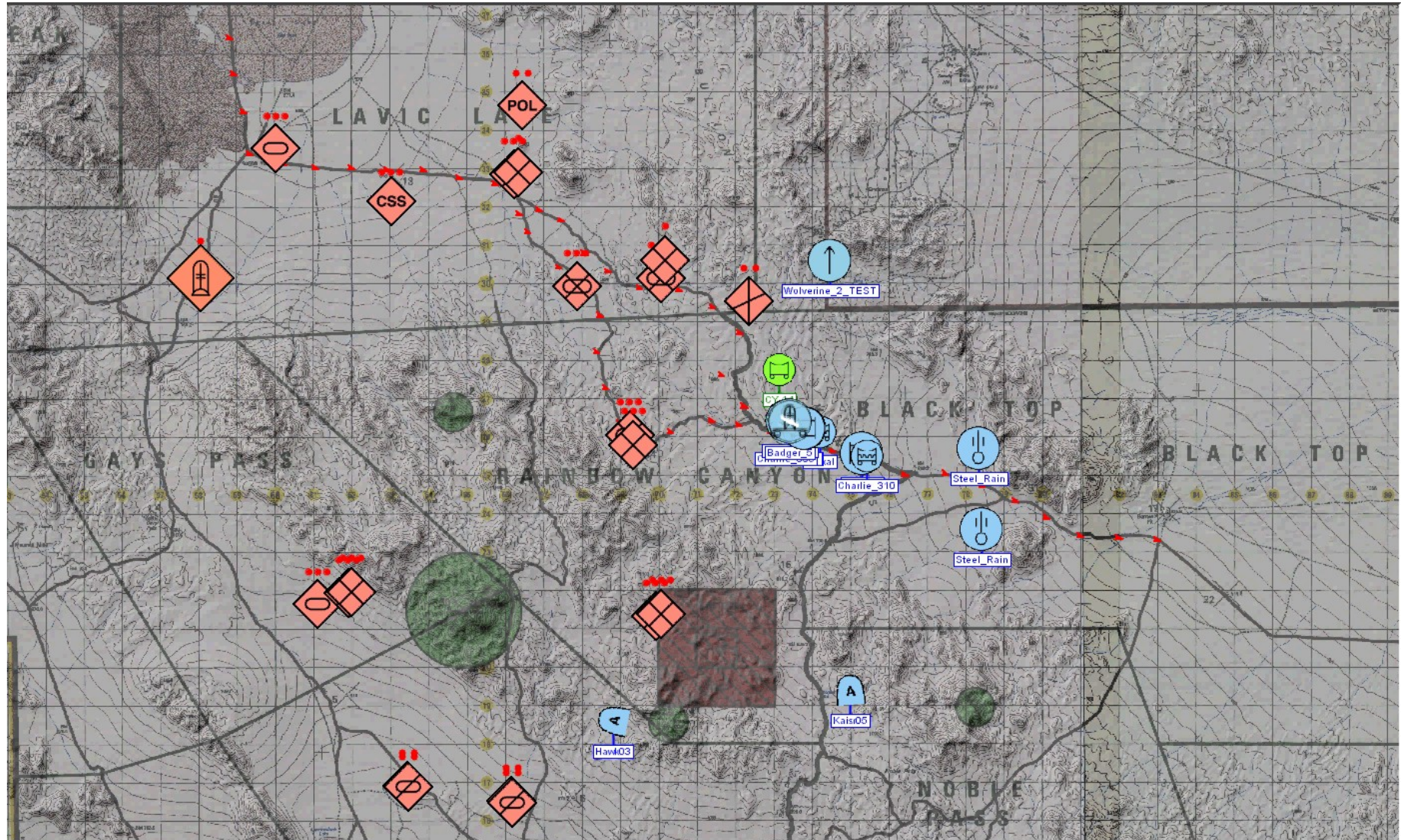


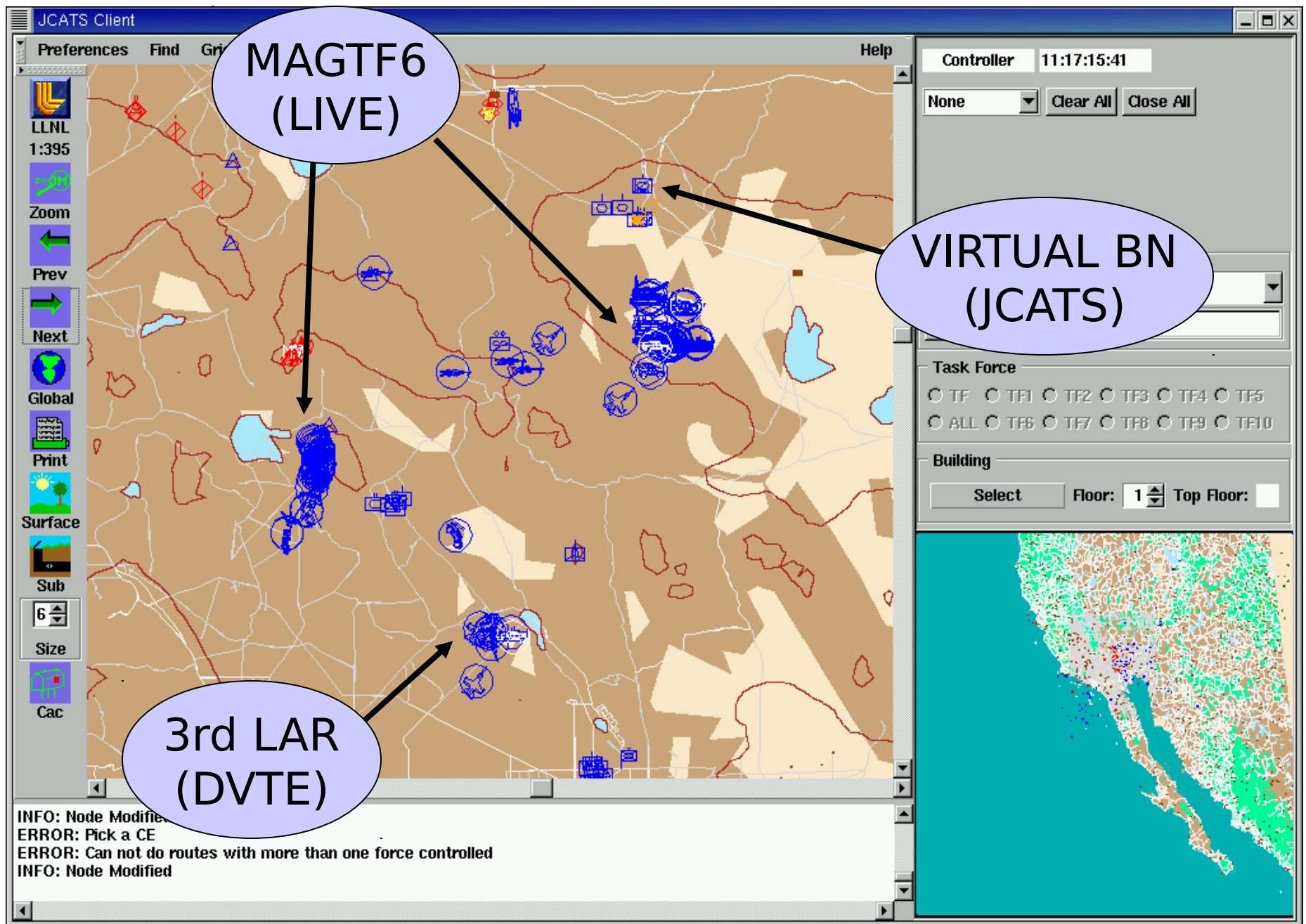
CAX FINEX Day 1 Breach

(click)



CAX FINEX Day 3 (click)





KEY: encircled entities are non-JCATS

Fusion of
Disparate Data
Into Common
Operational
Picture

FUTURE INSTRUMENTATION CONCEPT



PODS

IFI



IGRS



BFT

Time
Space
Position
Event

Time
Space
Position

Time
Space
Position

HITL



Control
BDA

Time
Space
Position



**TENA
Conversion**

**TENA
Conversion**

**TENA
Conversion**

**TENA
Conversion**

**Distributed
Training**

Event Network

**Common
Operational
Picture**

KEY ISSUES



1 N 115:58:40.0 W
333 E 3819122 N MGRS=11SNU9383319122
(6533 ft) HAG = 1602 m
mph (0 kts)
S = 51



INSTRUMENTATION

- Power brown-out caused interference with Safety Net
- Mitigated by moving power units around
- Indication that hilltop relays/collection points need engineering
- Some IGRS units not turned on

EXERCISE CONTROL

- Coyotes (CAX Controllers) accustomed to manipulating RED tracks without consultation
- Pressurizes scenario cohesion
- Stressed JECG

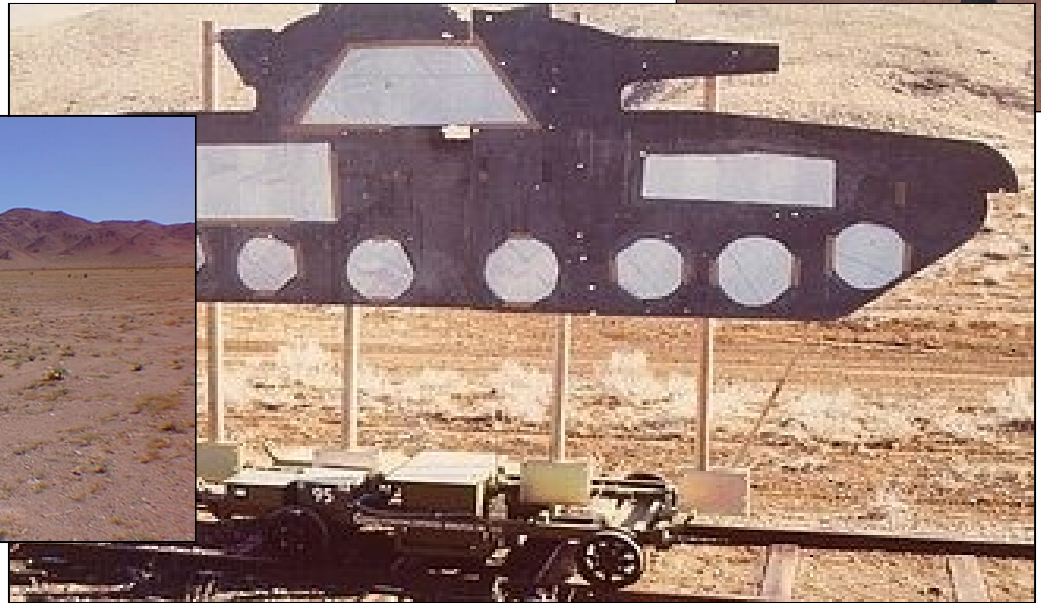
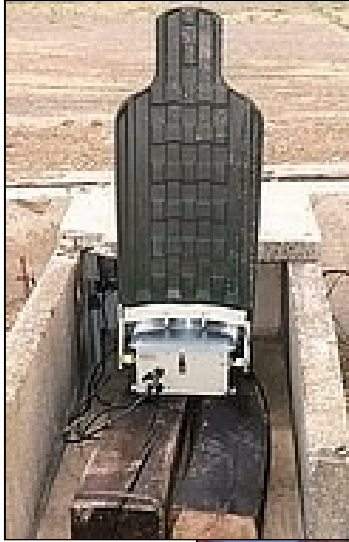
CONSTRUCTIVE SIMULATION

- SNE choked with non-existent rivers
- Observation ranges unrealistically short
- Ground units missing FOs
- Viewer & maps

VIRTUAL SIMULATION (DVTE)

- Under-utilized
- Entity Count (our bust)
- LAR not doctrinally Controlled
- DVTE Air Requested and Denied

RANGE TARGETRY WAS NOT EMPLOYED

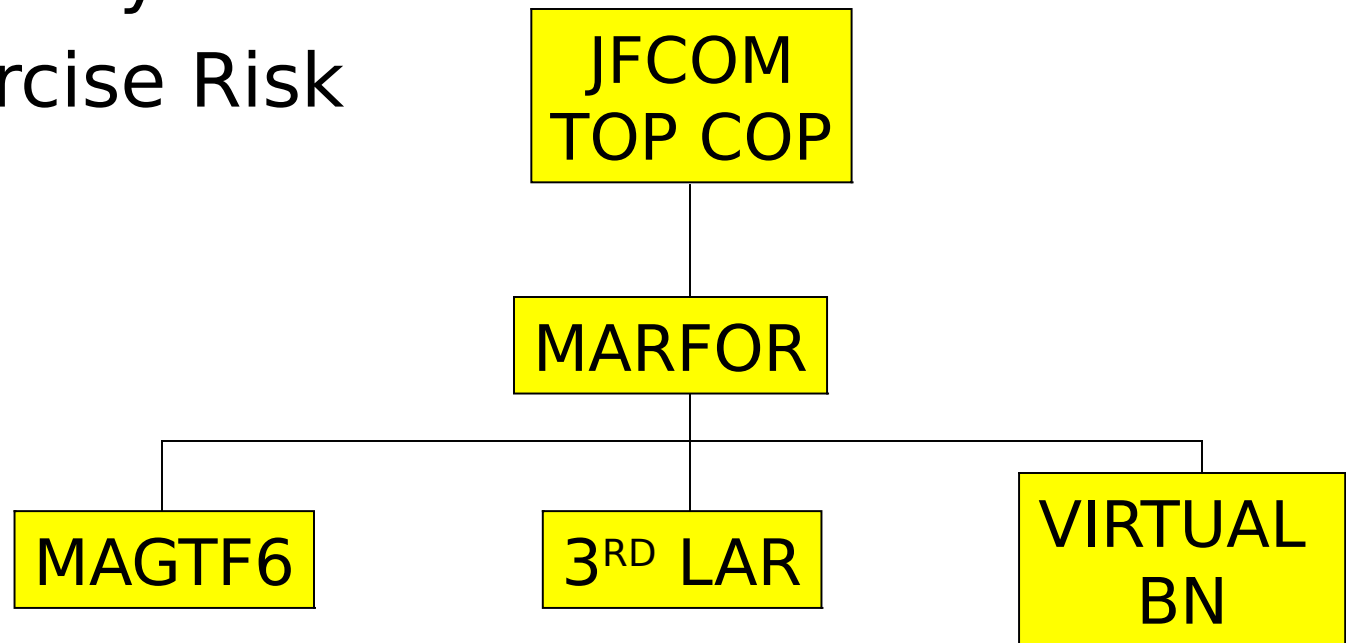


Joint Close Air Support

- ETAC training vs. Air Crew preparation
- Army-USAF Culture Gap
- Air Management became an important Assessment Point LATE in the game.

JOINT CONTEXT

- Context (TOP COP) stopped at the MARFOR
 - Security
 - Exercise Risk



SECURITY

- **SECRET** due to IOS and DISA feed
- High Cost
 - personnel requirement
 - access control
 - potential limitation of participants

REALISTIC C2

- Artificial (insufficient) C2 systems in the Field
- Command Structure under-manned but became Focus of Assessment (AOC, CAOC)
- Dual ATO's (USMC and JNTC) avoided by emergency deployment of TBMCS

JECG PERSPECTIVES

- Non-interference frustrated JECG
- Horizontal = No Flexibility
- White Cells needed preparation and smart-pack
- JECG was a Pick-up Team
- Isolate PA and DVs from Exercise

Questions?

